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Serial No. 09/577,264  
Docket No. 0002.12

**APR 08 2008**

**CLAIMS**

1-55. (Cancelled)

56. (Previously presented) A method for treating osteoporosis in a mammalian host comprising,

dispersing a powder pharmaceutical composition consisting essentially of a therapeutically effective amount of a biologically active N-terminal fragment of parathyroid hormone, a pharmaceutically acceptable bulking agent and optionally, an aerosol propellant in a volume of gas to produce an aerosolized bolus; and

administering by inhalation to said host's alveolar region said aerosolized bolus, wherein at least two boluses are administered, and wherein said administration results in a pulsatile serum concentration having a peak concentration within about 30 minutes after administration, followed within about 30 minutes by a decrease to below about 50% of said peak.

57. (Previously Presented) The method of claim 56, wherein the mammalian host is human.

58- 59. (Cancelled)

60. (Previously Presented) The method of claim 56, wherein the aerosol propellant, if present, comprises a chlorofluorocarbon or a hydrofluorocarbon.

61-62. (Cancelled)

63. (Previously Presented) The method of claim 56, wherein the aerosol propellant comprises a hydrofluorocarbon.

64. (Previously Presented) The method of claim 63, wherein the hydrofluorocarbon comprises at least one member selected from tetrafluoroethane and heptafluoropropane.

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65. (Previously Presented) The method of claim 56, wherein the powder comprises a mean particle size in the range from 0.5  $\mu\text{m}$  to 5  $\mu\text{m}$ .

66. (Previously Presented) A method for treating osteoporosis in a mammalian host comprising administering by inhalation an aerosolized bolus of a pharmaceutical composition consisting essentially of a therapeutically effective amount of a biologically active N-terminal fragment of parathyroid hormone, a pharmaceutically acceptable bulking agent and an aerosol propellant, wherein the bulking agent comprises at least one member selected from sucrose, lactose, trehalose, human serum albumin, glycine, cellobiose, dextrans, maltotriose, pectin, sodium citrate, sodium ascorbate, and mannitol, and wherein said administration results in a pulsatile serum concentration having a peak concentration within about 30 minutes after administration, followed within about 30 minutes by a decrease to below about 50% of said peak.

67. (Previously Presented) The method of claim 56, wherein the biologically active N-terminal fragment of parathyroid hormone is PTH34.

68. (Cancelled)